

containing M30 activated carbon pyrolyzed at 1000°C of the Illustrative Example re activated carbons.

Figures 10a and 10b compare the second cycle voltage versus capacity plots of sample no. I of Epoxy Example 1 to that of the 700°C pyrolyzed sample of Prior Art Example 2.

Please replace the paragraph at page 12, lines 24-26 with the following rewritten paragraph:

B2 Figures 16a and 16b show the voltage versus capacity plot of the first discharge and charge of the battery comprising sample no. VII of Epoxy Example 1.

Please replace the paragraph from page 12, line 33 to page 13, line 2, with the following rewritten paragraph:

B3 Figures 18a, 18b and 18c show the voltage versus capacity plots for the first and second cycles respectively for batteries comprising samples prepared from the A type precursor in Phenolic Resin Example 1. The curves have been offset sequentially for clarity. (In the Figures, the shifts are 0.0, 0.15, 0.3, 0.45 and 0.7 volts for samples A700, A800, A900, A1000 and A1100 respectively.)

Please replace the paragraph at page 13, lines 27-30, with the following rewritten paragraph:

B4 Figures 22a and 22b show the voltage versus capacity plots for the second cycle of batteries comprising samples prepared from the B type precursor in Phenolic Resin Example 2. The plots have been sequentially offset by 0.1V for clarity.

Please replace the paragraph at page 38, lines 4-15, with the following rewritten paragraph:

B5
All samples exhibited high specific capacities but also substantial hysteresis in the voltage plot and substantial irreversible capacity on the first discharge. For example, Figures 8a and 8b show the second cycle voltage versus capacity plot for the battery containing M30 activated carbon pyrolyzed at 1000°C. The specific capacity is about 550 mAh/g and there is substantial hysteresis. Figures 9a and 9b show the first cycle voltage verses capacity plot for the same battery containing M30 activated carbon pyrolyzed at 1000°C. The first discharge capacity is enormous at about 2000 mAh/g and thus there is substantial irreversible capacity.

Please replace the paragraph at page 41, lines 1-16, with the following rewritten paragraph:

B6
The voltage versus capacity plots for sample no. I pyrolyzed at 700°C is compared to that of the pitch sample of Prior Art Example 2 pyrolyzed at the same temperature in Figures 10a and 10b. These two plots show almost identical behaviour (although the battery using sample no. I was allowed to plate more lithium). Figure 4 indicates that the two samples in Figure 10a and 10b have almost the same H/C ratio. Figure 11 shows the x-ray diffraction patterns of samples no. I, II, and III (offset by 1600 counts). Therein, it can be seen that sample no. I has a substantially smaller R than the corresponding pitch sample in Figure 5. There are very few stacked graphene layers in sample no. I as evidenced by the {002} peak amounting to only a shoulder on the low angle background. Figures 11 and 5 also show that these structural differences persist at higher pyrolysis temperatures.

Please replace the paragraph at page 42, lines 7-20, with the following rewritten paragraph:

B7
Figures 16a and 16b show the first discharge and charge of the laboratory coin cell battery employing sample no. VII. The battery shows a first discharge capacity of about 625 mAh/g and the first recharge capacity of about 465 mAh/g. The irreversible capacity of sample